Institutional Upgrade of HAMAG – Technical Assistance with Assumption of the UNDP/EU Guarantee Fund

Inception Report

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SUBMITTED TO
U. S. Agency for International Development
Zagreb, Croatia

UNDER CONTRACT NO.
160-C-00-04-00101-00

SUBMITTED BY
DAI Nathan Group – Croatia, LLC

January 31, 2005

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Inception Report

Introduction

HAMAG is the Croatian Agency for SMEs, and operates under the Ministry of the Economy. One of its aims is increasing access to finance for SMEs through guarantees of commercial bank loans. HAMAG operates its own guarantee programs, and recently has been working with the UNDP/EU to take over the management of a series of guarantee funds targeted to provide funding for loans to individuals and to small businesses in the Areas of Special State Concern. All parties concerned agree that HAMAG could benefit from institutional improvements to enable it to accommodate the acquisition of these funds, as well as from the organic growth expected from its own programs.

The overall objective of this scope of work, commissioned under USAID's Enhancing SMEs Project, is to improve SME access to finance through stronger institutional support of guarantee funds in Croatia. The objective of this work is to ensure that HAMAG's policies, procedures, and tools for managing guarantees follow acceptable standards of financial management, for the continued benefit of SMEs, particularly in Croatia's war-affected areas.

The scope of work calls for an action plan to be developed to cover the following elements. This is to be developed following a two week inception period to assess HAMAG's institutional capabilities, its database and MIS, its guarantee origination and approval process, and its guarantee portfolio annual review process.

Action plan to cover:

1. Upgrading HAMAG's administrative capacity with respect to its obligations and commitments enumerated in the General Agreement between HAMAG and UNDP/UNOPS, assist HAMAG in its efforts to fulfill those obligations and ensure that the full transfer of ownership of the UNDP / EU funds can be effected in due time.

2. Assisting HAMAG to further develop its database and MIS so that it can accommodate the additional guaranteed loans from the UNDP/EU funds and increased organic growth.

3. Helping develop an efficient mechanism to conduct annual reviews of HAMAG's entire guarantee portfolio, which is expected to grow with the acquisition of the UNDP/EU guarantee portfolio and organically.

4. Assessing and making suggestions for improving HAMAG's guarantee origination and approval process. Such a review is appropriate at this pivotal stage in HAMAG's development.

5. Assessing the feasibility of developing for HAMAG and the Croatian commercial banks a program similar to the U.S. Small Business Administration Certified or Preferred Lender Programs. If feasible, such a program would streamline HAMAG's guarantee approval process significantly and allow an expansion in its operations, therefore enabling it to increase SME access to finance.

6. Training a HAMAG Croatian counterpart, who will assume responsibility for overseeing the UNDP/EU Guarantee Fund portfolio.

Progress to Date

The following report covers three main areas:

- Summary of HAMAG Guarantee Activities
- Assumption of UNDP/EU Guarantee Activities
- Assessment of the Database and MIS Capabilities

There is a full report for each of these areas, including recommendations and suggestions at the end of each section for improving and enhancing performance. In all cases we consider the mark of success to be improved access to finance for SMEs, and all program changes are suggested with the idea that changes will make the guarantee programs easier to use and more user-friendly.

Summary of HAMAG Guarantee Activities

HAMAG has recently introduced a series of new guarantee programs for increased limits: these range from Kn. 1 million for startup businesses to Kn. 5 million for growing SMEs for expansion, up from previous limits of Kn. 400,000. More significantly, these new programs call for full payment of guaranteed amounts when the guarantees are activated, versus the prior policy of simply making scheduled loan payments. The old programs also called for HAMAG to be fully secured with liens on collateral, and in the future HAMAG will only take an unsecured debenture from the borrower, thus all collateral will run to secure the unguaranteed portion of the loan. These programs are strong, and address the shortcomings that were cited by the banks as unacceptable in the prior programs. We enthusiastically endorse the introduction of these programs.

Introduction of the new program terms required approval from the Ministry of the Economy, which required several months of negotiation time. HAMAG has indicated that it does not want assistance with the introduction of these new guarantee programs, and at the moment is satisfied with its approval procedure. Most particularly, the department head for guarantees at HAMAG has indicated that the agency is not interested in developing a preferred lender program, and does not think that such a program will be appropriate for another five years. Based on our experience, as well as on discussions with Croatian banks, we believe that a preferred lender program is necessary and desirable, and we are recommending that the matter be reconsidered over the coming months, with a formal or informal program established within six months.

We have also made additional suggestions concerning the guarantee issuance procedure which we think will increase the number and quality of loans and guarantees. We are prepared to work on assisting HAMAG on instituting any and all of these changes to procedure.

Finally, one of the tasks under the scope of work is to help develop an efficient mechanism for HAMAG to do an annual review of its guarantee portfolio. However, at this point HAMAG does not have up to date information from the banks about the status of the guaranteed loans or on the borrowers, and is not regularly collecting this information. We believe that this information is critical to the agency to managing its contingent liability, and certainly to do annual reviews. Our discussions with the banks indicate the banks consider doing regular reporting to be a part of doing business, and is not an undue burden. We believe that this is a good time to introduce and enforce reporting requirements, and can be regarded as a minimal tradeoff for availability of the new guarantee programs.

Assumption of UNDP/EU Guarantee Activities

The major driver of the assistance to HAMAG is the support in the takeover of the eleven guarantee funds for loans to returning refugees and SMEs in the areas of special state concern. These funds total over € 5 million, and have generated some € 11 million of loans in these regions. HAMAG has been chosen as the successor agency to take over these funds, as its interests in supporting SMEs coincides with the funds' purpose.

The task for HAMAG is to continue to guarantee the SME lending of these programs. The retail loan program will no longer be offered, and as the retail loans are repaid the collateral deposits pledged for the guarantees will be freed up to expand the SME guarantee program. The program is being administered through four regional banks, with assistance from local LEDAs and business service providers. Reportedly, the quality of portfolio and interest in lending to very small businesses in these economically depressed counties varies substantially from bank to bank. The task here will be to get to know each of the banks and their portfolios, and either encourage them to continue to make loans to the target borrowers, or to find other lenders that can do the job. Most of the tasks in the action plan speak to this task, starting with assessing the quality of the loan portfolios. While some initial meetings have been held with the banks, this task will begin in earnest once HAMAG has hired a new staff member to handle the assumption of these programs.

A set of recommendations at the end of this section are mostly concerned with the assumption activity, but there are also two specific suggestions concerning the Transfer Agreement among HAMAG, UNDP, EU, and the bank participants. These changes would allow HAMAG to institute more efficient guarantee approval procedures, as well as to change the bank participants as need be to encourage more lending. The beneficiaries of the program, SMEs in the areas of special state concern, would not be subject to change.

Assessment of Database and MIS Capabilities

HAMAG has been operating with a DOS-based system, but is in the process of switching over to a Windows-based system that is more user-friendly and will give the agency much more flexibility in collecting and reporting data. This system was reviewed by a consultant with substantial experience in IT applications for banks and loan portfolio monitoring. He has given the system and the IT staff high marks, with some suggestions about safeguarding the server, documenting the new system, and safeguarding data backup. He also does not anticipate any problems in capturing the data from the UNDP programs.

Summary of Progress on the Six Tasks

1. Upgrading HAMAG's administrative capacity with respect Agreement between HAMAG and UNDP/UNOPS – in process. This will be continued through meetings with the banks and LEDAs, and will include development of simplified procedures for guarantee approvals.

2. Assisting HAMAG to further develop its database and MIS so that it can accommodate the additional guaranteed loans from the UNDP/EU funds and increased organic growth – review is complete, system is deemed to be robust and capable of meeting information needs and handling the new loan funds.

3. Helping develop an efficient mechanism to conduct annual reviews of HAMAG's entire guarantee portfolio – suggestions have been made in this report for the verification of the contingent liability, and collection of data in the future. HAMAG will be asked to commit to requesting this information by a date certain.

4. Assessing and making suggestions for improving HAMAG's guarantee origination and approval process – This report does include a range of ideas on this subject, and ESP/the consultant are prepared to work on this further.

5. Assessing the feasibility of developing for HAMAG and the Croatian commercial banks a program similar to the U.S. Small Business Administration Certified or Preferred Lender Programs – HAMAG will be asked to commit to developing and instituting a preferred lender program by a date certain.

6. Training a HAMAG Croatian counterpart, who will assume responsibility for overseeing the UNDP/EU Guarantee Fund portfolio – HAMAG has advertised for and is interviewing candidates for this position. Additional work on evaluating and assessing the UNDP portfolios will recommence once this person is in place, estimated to be in early March 2005.

Next Steps

Following review of this report by ESP, USAID, and HAMAG, ESP and HAMAG will undertake to conclude a commitment memorandum summarizing the steps that it will take together to implement these recommendations, including dates for accomplishment of tasks.

The work on the assumption of the UNDP loan portfolios is expected to take place starting in March 2005.

Summary of HAMAG Guarantee Activities

HAMAG is the Croatian Agency For SMEs, which operates under the Ministry of the Economy. The main objectives of agency are 1) the certification program for consultants, development of consultant network and education, and 2) the administration of guaranty schemes for SMEs. HAMAG was created two years ago, largely as a successor to HGA, the Croatian Guarantee Agency, and took over its portfolio of some 3,300 guarantees and 25 employees. After a suspension of the program for some time, it started issuing guarantees again in mid-2003. Since that time, however, the program's activity has been slight, issuing only 9 guarantees in 2003 and 12 in 2004.

New Guarantee Programs

HAMAG has just introduced new guarantee products which it thinks will respond more to market conditions and demand. The provisions of these guarantees were approved by the Ministry of the Economy in the fall of 2004, and HAMAG is now publicizing the program through mailings to the banks, information on its website, and most significant, visits to both the head offices and regional offices of the banks. HAMAG indicates that the programs are being well-received, and substantial activity is expected. The agency has targeted issuing 400 – 500 guarantees in 2005, and says that the Ministry of the Economy wants 1,000. Terms of the new programs are as follows:

New guarantee programs: Approved by government in October 2004

Program Name	Maximum Loan Amount	Guarantee percentage	Maximum interest rate/origination fee
Areas of Special State Concern	Kn 2 million	70%	8% / no fee
Agriculture	Kn 3.5 million	50%	7% / 0.95% fee
Growth and Development	Kn 5 million	50%	7% / 0.95% fee
New Businesses (under 2 years)	Kn 1.5 million	80%	7% / no fee
Working Capital	Kn 3 million	40%	9% / 0.95%

Changes in program:

- Principal only guaranteed – previously interest was covered as well
- HAMAG will pay full guarantee when activated (previously made scheduled payments) after bank has started collection procedure
- Collateral will run only to bank – HAMAG will take a debenture from borrower
- Within 30 – 60 days following disbursement bank must provide evidence of use of proceeds to HAMAG, which then confirms that loan has been used as expected and guarantee is valid (or that guarantee amount is lower, if use is not as stated) – previously, use of proceeds was only provided when guarantee was activated, and insufficient documentation or inappropriate use of loan proceeds caused HAMAG to decline to honor guarantee

These changes have been well-chosen, and reflect the need of the program to be willing to accept more risk than the banks themselves. It also appears that the procedures will be cleaner and more straightforward. Historically some of the guarantees when drawn upon were not paid either because funds were not used as intended, and/or because the bank could not demonstrate that funds had been used as intended, likely because documentation had been lost over time. This new procedure stresses the importance of the proper disbursement of funds, but also includes a confirmation that the bank and HAMAG agree, long in advance of any possible guarantee activation, that this will not be an issue.

Existing Guarantee Portfolio

In total HAMAG or its predecessors have issued 3,326 guarantees have been issued. The actual outstanding contingent liability does not seem to be readily available; several days after requested the agency advised that 1,544 loans had been paid off, suggesting that about 1,692 loans are outstanding (and 90 activated). The estimated value of the total contingent liability is Kn 254,812,050 (average of Kn 153,600, about €20,350 or $25,750 per loan). These figures are based on amortization schedules.

It is important to note that HAMAG's total resources for guarantees is Kn 500,000,000, about € 66 million, or $86 million. At this point its resources are not even leveraged 1:1. Given that guarantees are unlikely to be called upon, HAMAG can issue more guarantees than it has funding for (not unlike an insurance company, which expects to pay on only a small number of its policies every year). At present the agency has an activation rate of about 3.5%, suggesting that it could guarantee up to Kn.28.6 for every kuna of payment that it expects to make. More conservatively, if the agency targeted a 10:1 leverage (suggesting that the default rate will be 10%), it could guarantee some twenty times more loan volume than it is presently guaranteeing.

The most active banks in the program have been Zagrebacka Banka, Privredna Banka, Splitska (now HVB-Splitska) Banka, and Slatinska Banka. The first two are the largest banks in the country and represent the domestic banks (although now both owned by Italian parents), and Slatinska Banka is one of several small domestic banks. This list does not include any of the large foreign banks that have entered the market in recent years. Given the substantial amount of bank assets that these institutions represent (Erste, Hypo, and Raiffeisen together hold about 28% of bank assets as of 30 September 2004) it will be important to reach these banks and encourage them to be using the program as a part of their SME lines of business.

HAMAG also does loan guarantees for HBOR, the state development bank. At some point HBOR's sources of funds should be considered, as it seems inappropriate for one government agency to guarantee the obligations of another. To the extent that HBOR is lending funds passed through from international commercial banks the guarantees may be acceptable. We also do not believe that HAMAG should provide a guarantee of funds sourced from multilateral donor/lenders, since the government, through HBOR, is already liable for these funds, thus the HAMAG guarantee is redundant. At this point HAMAG's guarantee capacity is huge, but as more guarantees are granted the guarantee funds will be more leveraged, and excluding HBOR from the program would facilitate more private lending to SMEs.

Both the old and new guarantee programs have had requirements for banks and lenders to report year end data, but has not seen much followup. We consider this a critical gap in HAMAG's program management, and will discuss it at length later.

Historically HAMAG has a low level of activations on its guarantees at less than 4%, but it does expect these rates to go up with the more liberal terms of the new programs. To date the activation experience has been as shown below. There has been no particular concentration of bank calls for payment. HAMAG attributes the low activation rate to date to a strong visiting program to the borrowers, and the fact that loans were small, and borrowers could pay them from other sources .

90 guarantees have been activated, and of these:

- 48 fully paid
- 15 refused, conditions not met (not used for purpose intended, collateral not taken as planned)
- 27 in process – 14 of these will be refinanced or written off (paid off by Ministry of Agriculture)

Loan Approval Procedure

HAMAG's loan approval procedure is summarized below, and is a typical pattern for a guarantee program in which both the lender and the guarantor are charged with the credit decision.

Procedure –

- Entrepreneur presents business plan, etc., to bank – plan often prepared by a consultant, may be on World Bank format – includes a market analysis
- Documents provided – legal status (incorporation papers, sole proprietorship, etc), registration with court, borrowing resolution provided to bank, c.v.'s, financial documentation as prepared by business (balance sheet, profit and loss – may be prepared by an account service – HAMAG may ask for more details), copy of the owner's own identity papers
- (Ministry of Defense documentation of veteran status – HAMAG refunds application prep costs and/or pays interest in advance to bank – these grants will not be provided under the new system)
- Bank documentation – approval/analysis, collateral and insurance requirements
- Application for guarantee from bank, also signed by entrepreneur, with checkoff list of documents provided
- Info is input to HAMAG database (which can later generate guarantee documents, once all approvals have been put in)
- Loan analyst then does HAMAG analysis, justifying approval or decline, a paragraph on background, prior experience, new project, comments on the collateral, loan conditions
- Site visit for larger or more complex requests
- The guarantee is approved by the loan officer, her supervisor, and the agency

- The guarantee letter is issued to the bank, and must be signed off by the agency, the bank, and the borrower
- The bank provides a copy of its contract with the borrower
- Documentation is later sent to show use of proceeds

The loan analyst who described the procedure indicated that loan analysts could look at 20 – 30 applications per week, which seems far too high, particularly if a site visit is necessary, and if the analysis is any more complex or requires more information than is already supplied in the bank analysis. Historically the loan analysts did site visits, and the new procedure requires this. There are three loan analysts on staff at present, and it seems likely that the new system will quickly back up unless there is some corner-cutting and simplification of procedures.

Introduction of a Preferred Lender Program

The most expeditious way that guarantee programs worldwide have used to generate a lot of activity and to leverage bank resources is by authorizing the banks to decide themselves whether or not a guarantee should apply to the loan. There are a range of ways to do this, usually with program provisions such as the following:

- Preferred lender status is applied for, or authorized, based on prior performance – the bank has already submitted a number of acceptable loans for guarantee
- The bank's guaranteed loans, on average, maintain certain quality standards (e.g., no more than 5% or 10% portfolio at risk, based on 30 day arrears)
- The preferred status is not given to large banks as a whole, but is conferred on regional or branch offices
- Rather than submitting a full application with financial statements, the bank submits summary information on the borrower and the guaranteed loan, including a certification that the borrower has appropriate registration status, loan documents were executed appropriately, and that funds were disbursed as described. (HAMAG would reserve the right to audit such documents as necessary, and the lender would be prepared to submit them in the event the guarantee was called upon.)
- The guarantee may be limited in amount – for instance, only for loans of Kn 1 million or less would be eligible for a bank-designated guarantee; larger loans would be subject to review
- The total amount of guarantees for a single institution (or a single regional office) would be limited to a blanket amount, for instance, Kn 40 million (This is known as a portfolio guarantee.)
- The guarantee percentage could be limited. For instance, if a lender self-designated a guarantee to a growing enterprise, the guarantee amount might be 40% , instead of the 50% that would still be available under the regular guarantee process.

HAMAG has indicated that while it is familiar with the preferred lender concept (from a study tour that covered the Netherlands' SME guarantee scheme) it says that it does not trust the Croatian banks enough to implement such a procedure, and would not expect to do so for another five years. Ultimately however, we consider such a provision necessary if the program is going to reach the volume of guarantees and underlying loans to SMEs to have a significant economic impact, and specifically to meet the Ministry of the Economy's 1,000 guarantee target for the year (or even HAMAG's 400-500 guarantee goal). While it would not be appropriate to immediately introduce such a provision while the new guarantee programs are being put in place, this concept should be discussed again in depth, particularly with the banks that are active in the new program, in the next six months. It may also be possible to unofficially institute a preferred lender program by doing a much quicker review on guarantee requests from lenders that have submitted several applications of appropriate quality.

Information Collection and the Use of Information

The section on the information technology system extensively describes the old and new systems and capabilities, so this will not be repeated here. In summary, however, HAMAG is able to sort and present information on the guarantees by type of registration, county, line of business, amount of loan, number of employees, and bank.

From a user's perspective, however, two aspects of the system concern us: 1) the lack of independent verification of data, and 2) the apparent lack of usage of the information that is available.

Several of the HAMAG employees interviewed expressed a desire to have a computer system that could calculate the amortization schedules of the guaranteed loans, that was robust enough to incorporate all the ways that the banks account for loans, effectively so that HAMAG would not have to rely on the banks for amortization information.

While we appreciate the concept of being able to project the loan paydowns so that the agency can plan on the usage of the guarantee funds, it would be unusual for a loan to pay down exactly on schedule. If a loan is calculated on a simple interest basis, for instance, any payment made not on the due date will alter the amortization schedule somewhat. Since the banks are the master record keepers of the loan accounting and HAMAG merely a shadow, it is vital that HAMAG confirm loan status information with the banks from time to time. These data are critical to verifying HAMAG's contingent liability exposure. Additionally such information is important for HAMAG's own planning process.

HAMAG has indicated that both the old and the new procedures and agreements call for the banks, and the borrowers, to report data to it from time to time, but HAMAG has found both unresponsive when it asked for information. We do think, however, that it is time to revisit this point. HAMAG is offering strong, responsive guarantee programs, and a minimal amount of reporting, which likely can now be done electronically, is not an onerous burden.

The other aspect of information usage which we find surprising at HAMAG is the lack of regularly generated reports in use. During a week of meetings with HAMAG we were never provided with copies of reports that are in use around the office. Requests for information could not be immediately answered, and it took a day or two to determine that the agency had approved 12 guarantees in 2004, that 1,544 loans had paid off, and that the agency's exposure was Kn 255 million (estimated, based on the projected amortization of the loans). We did not see reports of usage by county or line of business, or average original loan size.

It may be that the guarantee program has been so inactive that such reports are seem as meaningless, or the reports so unchanging that some statistics are known by heart. However, we hold the view that merely having the capacity to generate reports, which both the old and the new systems can do, is not enough. There is no point to paying for an information system if the information is not used, and we do not believe that the agency can be actively managing itself without regular information reports. HAMAG could be playing a significant role as a source of information on SMEs by regularly generating reports, and could get to know its own clientele much better, including, for instance, knowing where the concentrations of lines of business are geographically, and knowing which banks finance different sized businesses.

Recommendations For HAMAG – Guarantee Program

Information Collection

HAMAG does need to get some information on a regular basis from the banks, most vitally to track its contingent liability position. There is always a temptation to ask for a lot of information, but HAMAG needs to keep in mind that there is a cost to the banks of doing this reporting, so requirements should be simple, easy to obtain, and easy to provide. Reporting format should be flexible (i.e., written, e-mailed, sent electronically – even through a web-based application).

In discussions with the banks we note that they do not consider the idea of reporting on a particular portfolio unusual or difficult, and do regularly report to other agencies, such as the World Bank and EBRD, on a quarterly or semi-annual basis.

Determine HAMAG's contingent liability

- The current guarantee portfolio needs to be inventoried, so that HAMAG can confirm the following information:
    - Loan date, maturity date
    - Outstanding loan balance
    - Status of loan (0-30-60-90 days past due)
    - Loans repaid

This information is needed to determine HAMAG's contingent liability, also so it can forecast activation of guarantees.

This may be most easily be done by providing a schedule of HAMAG's record of outstanding guarantees to each bank, and asking the bank to confirm or correct the information. Rather than just providing a printed report we suggest that the list be provided as an Excel spreadsheet, so that data can be transferred into the loan accounting system.

Collect contingent liability data on a quarterly basis

- Information on the outstanding guarantees should be collected on a quarterly basis (or, at very minimum, a semi-annual basis; a monthly basis would be even more desirable):
    - Outstanding loan balance
    - Status of loan (0-30-60-90 days past due)
    - Loans repaid since last report

In addition to confirming HAMAG's contingent liability, the past due information is needed for treasury management and risk management. As HAMAG considers adopting a preferred lender program, the status information will be significant in rating the lending capabilities of the banks.

Collect borrower performance data on an annual basis

- Annually collect data on borrowers:
    - Total assets as of year end
    - Total sales for the year ended
    - Number of employees

These data are quite simple, but can provide a strong basis for demonstrating economic performance and growth. The baseline financial data are available as a part of the application, and are typical information for the bank to collect on an annual basis (i.e., a bank will standardly request an annual report from an active client, which would include the total assets and total sales figures; asking about the number of employees is a basic question that would be posed at an annual client review).

Note that HAMAG already inputs three years' of total assets and total sales figures, so it would be easy to do some real trend analysis. The growth in the number of persons employed by the borrower firms is probably the most significant statistic that an agency promoting SMEs can generate. While the guarantee program cannot, and should not, directly claim that it created either the employment increases or growth in sales and assets, it can cite that the clients that it supports are enjoying these increases in business.

New Guarantee Program Implementation

As noted above, HAMAG has revised its guarantee programs and policies to be more attractive to the banks, and we do expect that the guarantee programs will be far more actively used. We are hearing that the banks are enthusiastic and interested in the programs. In our reviews of the programs and contacts with the banks, we do have several suggestions to offer to generate even more acceptance of the program.

1. **Develop a handout that explains HAMAG's position as an agency under the Ministry of the Economy and its financial backing for guarantees**. One of the large foreign banks indicated to us that it did not know HAMAG, and would not even consider using the program without being assured of HAMAG's ability to honor guarantees.
2. **Follow up on all the mailings to the banks, and schedule meetings to explain the program further**. Our contacts with some of the smaller local banks indicate that they have received the information about the program and are quite interested. While we recognize that the coverage of the larger banks is greater, some of the smaller banks are exclusively looking at SME lending as a specialty, hence may be some of the most active users. There are several examples worldwide of banks that have successfully developed guaranteed SME loans as their main line of business, and these banks will aggressively promote their programs.
3. **Create a customer service representative/contact for each bank**. A good way to develop a strong working relationship with the banks is to designate a contact person for each bank who can call on the bank, encourage applications, and troubleshoot.
4. **Encourage the banks to appoint their own HAMAG "guru" who will work directly with HAMAG.** This person will get to know the HAMAG programs and provisions well, and can be an effective funnel and filter to speed the bank's guarantee applications through the process.
5. **Develop a training program in the use of the guarantee programs, primarily for use in the branches in the regions**. As the program is introduced certain elements will emerge as requiring more explanation and detail, and a brief training course (2 hours or so) can cover case studies which highlight these points, and explain the program in general to branch employees, and be regularly repeated to cover the constant addition of new staff in the bank branches.
6. **Develop a quick credit review procedure to deal with a volume of loan applications.** As noted above, the banks are looking for quick answers on the guarantee decisions, and HAMAG does not have the staff or resources to give a substantial volume of guarantee requests the same scrutiny. ESP is particularly positioned to help in implementing such a review procedure, which could be an adaptation of a credit scoring system.
7. **Develop a preferred lender program**. As noted above, this is needed if the program will be able to deliver the economic impact and benefit for SMEs that it intends, and specifically to meet the Ministry of the Economy's targets for new guarantees. Details of the range of preferred lender options are shown above, and ESP is prepared to provide substantial assistance on this.
8. **Start to publicize success stories**. While the banks are the main clients of HAMAG, more information about the program can generate SME client interest, so that the SMEs are seeking guaranteed loans, and seeking out the banks that know the program. We would also expect to see promotion by the banks of HAMAG guarantees as an available bank product.
9. **Expand the program to non-bank lenders, such as leasing companies**. Leasing companies face some operating restrictions in Croatia because of

provisions in the tax laws. However, leasing represents an attractive alternative form of finance for equipment purchases, which can be significant to growing businesses. Note: we recommend that HAMAG prohibit any guarantees for private passenger vehicles or private company fleets.

10. **Be prepared to respond on inquiries concerning the changes affecting the old guarantees.** One of the attractive aspects of the new guarantee program is the immediate payment of the full guarantee, and should be applied to the old loans if possible. Further, we hear anecdotally that some banks are not willing to participate in the new program unless old guarantees are paid as requested. While we recognize that the bank may not have provided the necessary documentation to justify payment of the loan, we think that HAMAG may wish to reconsider these cases. As long as the request does not seem abusive (e.g., the loan did not benefit an individual at the bank, loan usage seems reasonable but documentation has been lost) it may be worth negotiating a settlement with the bank. We concede that HAMAG might be totally correct about its position of not paying, but if this posture causes a bank to not participate in the new program the ultimate loss will be fewer loans for SMEs.
11. **Develop a "new attitude" towards the banks.** This is a less tangible recommendation, but ultimately is the most important. HAMAG has not had a good reputation with the banks in the past few years, and in turn has faced difficulties in working with the banks. HAMAG's attitude, however, must be that its relationship with every bank is starting afresh from this point. HAMAG will not be successful in accessing finance for SMEs unless it forms real partnerships with the banks, and both parties realize that they share the same interests in developing good SME clients.

HAMAG Approach to Assumption of the UNDP/EU Guarantee Programs in the Territories of Special State Interest

Introduction and Background

HAMAG is preparing to take over the UNDP-directed (UNDP and EU funded) loan guarantee programs that operate in the areas of special state concern. There are two types of guarantees:

Retail program – (5 programs) loans of up to € 8,000, which are 50% guaranteed (maximum € 4,000 payment) for individuals. Loans were originated by UNVs (United Nations volunteers: local agronomists and economists; were paid about $800 a month) who visited and assessed clients, and then loans were booked by local banks. Approximately 1,600 of these loans were made, and about 60% of them are outstanding. The average loan size was € 3,720.

Corporate program – (6 programs) loans of up to € 70,000, which are 50 – 70% guaranteed (maximum €49,000 payment) for SMEs. These loans were originated by LEDAs or local business service providers, and approved by a credit board including the bank, the LEDA, and UNDP representation. About 250 of these loans were made. The average loan size was € 28,800.

All of the loans were guaranteed by the deposit of Euros or US dollars into the bank, and each bank is holding more cash than is needed to secure the loans, both because maximum loan levels have not been reached and because earnings on the funds, at low rates such as 1-2% per year, have not been paid out. As of 30 April 2004, the following amounts were on deposit in the banks (both pledged and unpledged):

	Accounts in Euros	Accounts in Dollars
Principal	4,085,000	1,310,000
Accrued Interest	118,945	56,659
Totals	€ 4,203,945	$ 1,366,659

The plan on transferring the guarantees and guarantee funds is that the retail loan program will be stopped, that as the loans pay off the pledged guarantee funds will be available for HAMAG SME guarantees. The SME programs will be continued.

The transfer of the programs was expected to occur shortly, but there has been some discussion between UNDP and EU concerning a clause in the transfer agreement which called for the funds to be conditionally transferred to HAMAG, with reporting on activity and a review in a year's time on performance. If the performance was unsatisfactory, per the agreement, the funds are to revert to UNDP. SME guarantee programs were to be maintained for at least three years, and after that HAMAG would be free to use the funds as it chose. The EU prefers that the funds just be unconditionally transferred to HAMAG, arguing that the funds were intended to go to the government of Croatia in some fashion. It is assumed that this problem will be resolved shortly, and that the transfer will go through.

While extensive work was done by UNDP to assure itself that HAMAG had the legal authority to take over the funds, an appropriate accounting system in place, adequate staff, etc., it appears that little attention has been given to the loan portfolios themselves, or to the banks and LEDAs administering the programs. The transfer agreement suggests that HAMAG will continue the SME programs on an unchanged basis, but discussions with persons who have been involved with the programs indicate that the banks' and LEDAs' levels of skills and interests in continuing to lend to small SMEs, frequently startups, in the poorest areas of the country, vary widely. These programs were established to respond to needs in areas that had been affected by the recent war, but times and circumstances have changed, hence program changes should be expected as well.

At this point, it is important for HAMAG to take an activist approach to taking over the UNDP loan portfolios. It needs to assess the strengths, weaknesses, and interests of its prospective partners, so that it can plan how it intends to use the program to facilitate small scale SME lending in the affected areas. We recommend that HAMAG develop a plan for the overall administration of the program, as well as a plan for dealing with individual banks and LEDAs. Summarized below are the issues that need to be reviewed in the takeover of the program:

- Payment status of loans and followup on past due loans
- Guarantee deposits
- Loan sourcing and approval procedure

The final major consideration will be whether HAMAG should continue to offer the program through the same bank and business assistance partners, or make changes.

Veljko Paus has written a thoughtful summary of possible changes that could take place in the program to align it to the HAMAG program, and some these suggestions have already been accepted (e.g., the retail loan program will be suspended). References to Paus's suggestions will be included below.

The vision in reviewing and recommending changes for the program must always be, delivery of credit to very small businesses in the areas of special state concern. If the bank is doing the job, this should be continued. If loan payments are a problem, these need to be cleaned up so that funds are available for other clients. If procedures are cumbersome, they should be streamlined so that more credit can flow. If new providers will deliver more credit, these avenues should be pursued.

Payment status of loans and followup on past due loans

It is our understanding that lending slowed down since last summer, when Denis van Dam, the UNDP staffer who organized the program, left UNDP. Further, several of the LEDA staff and bank staff who had worked on developing the loan requests have also left. The first step, therefore, is to determine a starting point, establishing the value and quality of the individual portfolios, including the following current information (31 December 2004 statements, monthly statements to be provided thereafter):

- Listing of loans, including client name, original balance, original date, current outstanding balance, amounts of past due payments
- (Aging of loans, if available, segmented by 30 – 60 – 90 days and more)
- Discussion of procedures for followup on past due loans, what action has been taken – for both the retail portfolio and the SME portfolio
- Determine if there is someone who is in charge of the portfolios, what contact they have with borrowers
- Bank's interest in lending to the SME segment of the market, specific plans, products, staffing

In determining how to approach the task of collecting on problem loans, several issues should be considered. HAMAG may wish to take a different approach in different areas depending on local partners. Issues include:

- Credit culture – a significant point to UNDP was the development of a credit culture in the areas or special state concern, that loans should be repaid, and borrowers pursued for repayment of loans. This is a point for HAMAG, and the banks, to respect, as applying the guarantee funds and not pursuing borrowers for repayment will send a bad message that will be remembered much longer than the loan program. (Note that it is in HAMAG's interest for the loans to be collected, as this will preserve the guarantee capital for additional SME lending.)
- The UNDP's original program, and the language in the transfer agreement, is specific in that the guarantee is secondary to collateral, that any collateral or other guarantees are to be pursued first and exhausted before funds are offset.
- If there is a substantial past due portfolio HAMAG will have to set guidelines on the banks to work with this. Some of the options appear to be:

    - Review individual cases, particularly for those over 90 days past due, and encourage the banks to initiate court proceedings; permit offset of deposits for loans that have been pursued and would otherwise be written off
    - Encourage the bank to follow its regular followup procedures, and to make monthly reports on individual loan collections to HAMAG
    - Separately, or in conjunction with the banks, hire loan collectors. This option includes, for the retail loans, hiring the UNVs on a part time or per item basis, to do followup. A similar agency structure, with compensation, should be investigated for the LEDAs as well.

- The approach selected may be different for the retail and SME portfolios, and may include a combination of the three approaches. Regardless, the matter should not be allowed to fester, and a decisive plan should be quickly presented to the banks.

Guarantee Deposits

The monies on deposit with the banks are also a significant issue. The handover agreement calls for the cash guarantees to be 105% funded, with interest on the allocated funds (i.e., those pledged for guarantee commitments) earning 30% of the one month LIBID rate. The interest rate to be earned on the unallocated funds (additional monies on deposit that are not currently pledged for specific guarantees) is to be the LIBID rate less ¼%, higher than before, hence holding the unpledged monies is not as attractive a benefit as before.

We note that the funded guarantee was undoubtedly a major attraction of the program to the participating banks, as their loans are effectively funded to the extent of the guarantee with cheap, long term money. This would be particularly important to regional or local banks, for which the deposits would form a significant part of overall funding. The low interest rates also allowed the banks to give preferential rates to borrowers; if the unfunded 'promise to pay' guarantee by HAMAG is substituted for the actual deposits, the loan interest rates will likely rise. Further, the banks do not have the appropriate funding to provide longer term loans.

Loan sourcing and approval procedure

The transfer agreement as drawn is remarkably prescriptive, dictating not only the loan and guarantee limits, interest rates, intended recipients, and geographical locations, but even describing the loan approval procedure, directing HAMAG to continue the program of sourcing loans through the LEDAs, and continuing the credit committee structure comprising the bank, the LEDA, and HAMAG. A long period of time is allowed for the approval, including:

- LEDAs to provide business plans on borrowers at least 10 days before the meeting of the Credit Committee
- Credit Committee submits data to the bank at least 15 working days (three weeks) before the loan is scheduled to be disbursed
- Following bank approval, request for guarantee is submitted to HAMAG, which is to be issued within 5 working days

The process is cumbersome and redundant, and is unacceptably long by any standards of customer service for loan approvals or guarantees. (By contrast, HAMAG's own procedure calls for advising the bank of an approval within 3 days of receiving a guarantee application.) The transfer document further speculates that each committee would meet every 2 – 3 months, which suggests that an applicant could wait as long as ninety days to get a loan approved.

We recommend the development of a signoff procedure to take the place of the committee, which could include providing information to all stakeholders at the same time, even if approvals are sequential. A signoff procedure requires that approvals are obtained from all appropriate parties, but does not require that they physically meet to consider a loan and guarantee application. If the reviews of loan files indicate that the credit committee is essentially forming the loan recommendations rather than just acting on them (i.e., reviewing a business plan that has not been analyzed for loan repayment capability) HAMAG could develop a simple loan analysis procedure focused on the measurement of debt repayment capacity that could be completed by the LEDA or the bank.

Program Focus for the Future

Through this transfer agreement UNDP is trying to assure that funds will continue to be available for lending in the areas of special state concern, and that very small businesses in these economically depressed areas will get some special consideration for startup and expansion. We believe that this is its main concern, and despite the prescriptiveness of the transfer agreement, and that UNDP is less concerned with the procedural format as with the delivery of this type of credit.

The elements of the program that should remain constant are those that reflect the special needs of these very small businesses, and include:

Program Element	Limit	Justification
Loan size	€ 70,000	Loans are targeted to very small businesses – larger limits would attract businesses that should be able to qualify for credit directly or with a regular HAMAG guarantee
Percentage Guarantee	50-70%	This level of guarantee has been effective in the past to encourage bank participation
Additional Collateral	120% of ungteed portion of loan	Moral suasion, development of credit culture
Funded Guarantee	105% of guarantee amt	The “carrot” to the bank to look for loans that otherwise would not be sought out
Geographical Restriction	Limited to target counties	Address particular business development issues caused by war and aftermath

We note that HAMAG already has a guarantee program for businesses in the areas of special state concern, which allows for a 70% guarantee of loans of up to Kn 2 million (about € 263,000), so arguably the UNDP program does not need to be continued at all. However, the UNDP program will cover those businesses that will be left behind in a program that allows for larger loans, since the banks have a natural tendency and economic self-interest to seek out businesses that can handle larger loans. The availability of the HAMAG program does suggest, however, that the loan size of the UNDP program should not be raised. While some elements of the program are so beneficial (e.g., lowered interest rate, partial self-funding) that there is a danger that the market could be skewed, and the low loan ceiling limits this possibility.

The geographical restriction is perhaps now inappropriate because we are now some years after the end of the war, and it is arguable that the program should really address the problems of very small businesses in economically depressed areas, regardless of the cause of that economic depression. Because of the partial self-funding nature of the program, however, the geographical restriction is advisable for the time being. In planning program succession at the end of the four year operating period, however, HAMAG may wish to continue a UNDP-like program for small loans with partial funding for very small businesses in areas defined as economically depressed, such as those with high unemployment rates or low per capita gross domestic product. Banks that are truly interested in lending to companies that cannot qualify for the UNDP guarantees, can be directed to use HAMAG's regular guarantee program, as Paus encourages.

The maintenance of the cash deposits for collateral, from HAMAG's perspective, appears to be the most controversial part of the continued program. Paus notes that guarantees operate much like insurance, that relatively few guarantees are called, hence much less funding is needed and that funding can and should be leveraged. That is the basis of the guarantees that HAMAG provides itself, and it is clear that the UNDP funds are effectively being leveraged only at 2:1 (50% deposit for 100% funding) or less (70% deposit for 100% funding), which is extremely low. (In fact, because the entire guarantee deposit in each of the banks is not fully utilized, the leverage is even lower.)

As noted above, however, the presence of partial funding is the carrot that keeps many of the banks interested in the program, and maintenance of the funds in the bank is one of the ways to continue the bank interest in pursuing these very small business loans. The transfer agreement indicates that "unused" funds can be transferred to other banks, including new banks, that are approving loans to qualified borrowers. We suggest that a deadline be set, perhaps six months after the transfer agreement is effected, that funding over the 105% limit be swept out of the banks to a central account until used, but that this not be implemented for the banks that have continued to be active in the program and sourcing new borrowers. This would be the "stick" to encourage the banks to be actively seeking new clients, rather than passively waiting for qualified clients to be presented to them. The presence of targets and goals will be important to measure bank interest and participation.

Continued Participation of the LEDAs

The LEDAs or other local business service providers were originally included in the UNDP program because of their developmental interest in working with very small businesses. A substantial amount of the business development and deal qualifying work was assigned to them, while the banks took a more passive role. The banks at this point are more sophisticated and are better able to source and qualify loan prospects, thus the LEDAs may not be key to the process anymore. However, we believe that they may still be able to play an important role in finding and qualifying very small businesses that the banks might otherwise miss. An important issue for the LEDAs is covering expenses: in the past the UNDP paid for much of their operations, and it is unrealistic to think that the LEDAs can do this loan prospecting work on an uncompensated basis. We would recommend that HAMAG plan to pay a percentage or flat fee to the LEDA for deals that originate with them that are approved and closed, and consider this an appropriate use of the interest earnings/technical assistance money. (We are not suggesting that this be done for businesses that receive HAMAG guarantees under its regular programs. In such a case the business itself can and should pay for assistance that it receives from any business service provider.)

We also note that the banks do have an incentive to work with the LEDAs, in that all banks are looking to develop a network for business referrals. In the case of the UNDP loans, cooperation for the bank additionally would mean that the increased activity would help it maintain its unallocated deposits.

Participation of Other Banks and Business Assistance Providers

The UNDP program was unusual in that it designated only one pair of service providers in each region. Generally speaking it is preferable for programs to be open to more than one provider, because competition encourages more program use and more seeking out of clients. In this case, given the limited man-resources of UNDP and the newness of the credit, the limitations of the program were more understandable.

At this point however, a broadening of the program is desirable, both because some banks and LEDAs are not interested in the market segment anymore, and because new providers may be more active in sourcing qualified clients. We would recommend that the program be opened up, but with certain caveats:

- Attention should not be diverted from the new HAMAG programs. HAMAG is currently publicizing the terms of its new guarantee programs which have much greater coverage, geographically and financially, than the UNDP programs. For this reason any expansion of the UNDP program to other banks should be delayed for several months.
- In some areas the bank may be doing an effective job of finding and approving loans for the target businesses. In these areas the bank's efforts should be rewarded by continuing the exclusivity of the relationship.
- The restrictive program terms should not be eased or lifted. The program is targeted to a very narrow group of deserving clients, and should not be used to accomplish other bank expansion interests.
- The program does not have to be broadly opened up – i.e., while in certain areas it may be advisable to invite new banks to participate, it is not necessary to make this a publicized, broad invitation.
- Guarantee funding would only be provided to new banks as and when loans were approved, and would not be provided in advance.

The chart below shows the relative importance of the UNDP funds to the banks. In general the funds are not a significant funding source for any of the banks, and is minuscule for Nova Banka. Based on 2002 year end statistics (2003 and 2004 figures are not available on the website) the deposits are about 3% of Pozeska Banka's term deposits. We note, however, that these funds are unusual in that they are long term funding, and in that sense are not replaceable.

	Croatia	Jadranka	Nova	Pozeska
Total Assets 30-09-04 (HRK 000 omitted)	1,492,688	1,587,443	5,604,460	429,444
€ Equivalent at Kn 7.55 / €1 (000 omitted)	197,707	210,257	742,313	56,880
€ Amount of UNDP deposits ($ deposits converted at $1.30/€1) (000 omitted)	1,898	1,629	533	1,195
UNDP funds as a % of assets	0.960%	0.775%	0.072%	2.101%

Summary of Recommendations for Assumption of UNDP Loan Program

1. The overarching reason for HAMAG's assumption of the UNDP program is for the maintenance of a favorable loan program for very small businesses in areas of special state concern to get financing. All steps and changes to the program should be made with this continued purpose in mind.
2. Submit a clause for insertion in the Transfer agreement indicating that HAMAG will develop a guarantee approval procedure or procedures for each bank that will replace the guarantee approval procedure described in Annex III of the Transfer Agreement. The new procedure or procedures will not alter the amounts, intended beneficiaries, or geographical limits as described in the Agreement
3. Propose a clause that HAMAG will review the existing relationships and may suspend some of the relationships either immediately or within the year. HAMAG will also develop substitute relationships, and may develop multiple relationships.
4. Continue meetings with the banks and LEDAs to confirm interest in the program and status of loan portfolios.
5. Transmit loan information from the individual banks to HAMAG system, obtain monthly updates.
6. Formulate a plan with each bank and LEDA on a working relationship for the future. This may range from leaving the existing structure in place, setting activity targets to be met within a certain period of time (six months to a year) or suspending the program (actively pursuing past due clients, withdrawing unpledged funds).
7. Develop an expedited guarantee approval procedure or procedures. This may include sequential signoffs by e-mail, as well as the creation of a new approval procedure based on a debt coverage measure, credit scoring, and credit references.
8. Talk with banks and business assistance providers in areas that are not being served well about entering the program. Note: this should not interfere with the current promotion of the new HAMAG guarantee programs, and this should not ever be perceived as a substitute for those programs.

Assessment of the HAMAG Database and MIS Capabilities

Summary

HAMAG operates two primary systems; the guarantee system and accounting system. These two systems contain the majority of customer information, loan data, general accounting data and transaction history. The systems support the operations of HAMAG quite well. Recently the agency has successfully developed a new Windows-based version of its guarantee and activation system. Prior to this version of the software, HAMAG operated a custom developed DOS-based system running on a FoxPro database management system (DBMS) which is still in use for activations but the system will eventually go away as data is migrated to the new system.

The results of the study are very positive. HAMAG has done a number of things quite well with regard to the new version of the software and management of their IT infrastructure. Some positive aspects of our findings include:

1. Management skill levels are high;
2. The software is high quality;
3. System security is enforced;
4. The agency understands the relevance and importance of information technology; and
5. High level of cooperation among units

There are some things HAMAG might consider doing better:

Backup and Recovery – end of day back up is a minimal level of disaster recovery and not sufficient to support the needs of the agency. HAMAG should consider a more comprehensive backup of the production server and off site at another location.

Physical Security of the Server – the production server is located on the floor in the corridor outside the IT analyst's office in the main public area of HAMAG. With a high volume of foot traffic along that hall, the agency risks damage to the server by people kicking or dropping something on the machine.

System Documentation – currently the system is not documented. HAMAG must make it a priority to have the vendor provide system documentation so future work can be performed by other programmers or agency staff.

The plan to move the UNDP/EU Guarantee Program into HAMAG will have some implications for the IT system due to some fundamental differences in how the two organizations operate. The impact falls primarily in three major areas; deposit of guarantee funds to the partner banks, monthly reporting on actual loan repayments, and data entry of UNDP/EU loans and guarantees. Fortunately HAMAG has demonstrated it can accommodate any changes the UNDP program or organic growth may require in the future.

General Overview of the Project

This diagnostic review was conducted over a five-day period in January, 2005 during an assessment of HAMAG's institutional capabilities with regard to: the impending takeover of the UNDP / EU Guarantee funds; its database and MIS; HAMAG's guarantee origination and approval process; and its guarantee portfolio annual review process. The objective of the assignment was to evaluate HAMAG's current loan guarantee and activation software system, paying particular attention to its database and MIS so that HAMAG can accommodate the additional guaranteed loans from the UNDP/EU funds and increased organic growth in the coming years.

The time for the project was short and we needed to cover as much information as possible in order to make an assessment and draw some conclusions. Given the short length of stay at the agency, the process we followed was a series of interviews with key people from areas within HAMAG's departments with more time spent with IT operations. These interviews were comprehensive and covered a wide range of topics about specific systems relevant to the sustainable growth of HAMAG and the introduction of the UNDP/EU program into the agency.

We were able to gain a significant amount of understanding from this group as to the general structure, functions, and operations of HAMAG's IT system. The timing of the assessment proved a benefit to the agency and the evaluation team. HAMAG recently placed its new Windows based software into production and was able to demonstrate new enhancements and improvements to functionality.

During the diagnostic, we looked at the following systems:

- Guarantee application and processing
- Guarantee activation
- Accounting and bookkeeping

These systems support the operations of HAMAG quite well. Most of the agency's operations are supported by the guarantee and the accounting system. These two systems contain the majority of customer information, loan data, general accounting data and transaction history. A more detailed description of these systems is provided under the General Information Systems Overview. To accomplish the assessment we organized our analysis to capture as much information as possible in the shortest amount of time. For each area of study we looked at the following factors:

- Applications
- Data Bases
- Hardware/Communications
- Back up/Recovery
- Security

- Reports

In addition to the interviews, we also spent time examining the physical infrastructure and applications critical to the agency's success. This included a demonstration of the software and review of where the agency operates its main production server, data base server, and backup facility.

The remainder of this report covers our findings and recommendations. There are two sections to the report. The first section focuses on the diagnostic review of the IT systems from a sustainability and organic growth perspective. Within this section, we describe the overall IT infrastructure in detail and present some findings and observations.

The second section examines the implications for introducing new functionalities anticipated in the future. Specifically changes to business practices and policies regarding bank reporting and the integration of the UNDP/EU guarantee will represent modifications to the existing software.

Information Systems Diagnostic Review

General Information Systems Overview

HAMAG's IT operations are centralized at its head office in Zagreb. Although the agency has locations in other regions no information processing occurs in the field offices. HAMAG has no immediate plans to distribute its data processing to these offices. All guarantee applications, activations, and payments are performed at headquarters and processed centrally by the staff.

The IT department has one full time staff person that splits her time between managing the systems and business analysis. Much of her duties over the past year have involved developing requirements and working with the software vendor to develop the Windows version of the system. The new software was primarily developed by one third party programmer, Slon Ing, and particularly its president, Slobodan Loncarevic, working with the HAMAG analyst. The agency also out-sources its infrastructure support to a local vendor who maintains the server, desktops, and local area network (LAN). Discussions with the IT analyst indicate that HAMAG did not use a standard system development methodology in the new software development since the objective was to transition the exact same functionality from the old system.

Applications

HAMAG has successfully developed a new Windows-based version of its guarantee and activation system. Prior to this version of the software, HAMAG operated a custom developed DOS-based system running on a FoxPro DBMS. This system is still in use for activations and some payment processing but the agency will eventually sunset this application. The FoxPro system had flaws within the data base. Some of the indexes where corrupted resulting in some broken links and garbled data. The structure of the data base also allowed for double entry of information which resulted in duplicate records. These problems have been sorted out in the new version of the software due to diligent analysis of HAMAG and the programmer.

The new software is also custom developed using Visual Basic programming language and MS Access DBMS. The system is hierarchically designed around data and processing associated with guarantees. The software also flows logically and consistently with the way the agency does business. The system supports all processes within HAMAG including but not limited to:

- Inputting guarantee applications, loan information and customer information;
- Processing applications including document tracking and inventory;
- Analysis of loans including recording of customer financial statements;
- Statistical analysis of guarantees and activations;
- Activation management and preparation;
- Accounting and bookkeeping functions; and
- Reporting.

The system also allows users to track guarantees by bank, source of funds, program designation, location and industry type. Some new features have also been added to the Windows version including automatic generation of pro forma payment schedules for the loans, collateral valuation and expected required value, and automatic currency conversion carried throughout the system.

The new system is almost compete and is currently being used to enter guarantee applications under the new programs. The old FoxPro system is still also in operation supporting the old guarantee schemes and will continue to support these commitments until the data can be converted over to the new application and outstanding modules completed. Major modules still under construction include a special facility for activation analysis, some reports, and the online user help function.

The Window version is a significant improvement over the FoxPro system across a variety of measures including user friendliness, new features and functionality, a more stable and expandable data base, and higher levels of integration among the modules and the accounting system. In the new system, users will be able to authorize activation payment in the guarantee system after loan analysis and the payment will automatically update to the accounting system. Although not complete, a full two-way integration with the accounting system is planned.

The other major application in HAMAG is the accounting and bookkeeping system. The software is a commercial package purchased from InfoArt in Croatia and modified for the agency's use. The system performs all accounts payable and accounts receivable functions as well as asset management, tracking revenues and expenses, analysis, and preparation of balance sheet and income statements annually.

Another improvement over the FoxPro system is control over data entry and data processing. The new software enforces data and referential integrity making it impossible for users to make inappropriate entries into fields. For example, users cannot enter alpha-numeric characters into numeric fields. The system will also not allow certain functions to be performed until dependent actions have been taken. For example, a guarantee contract cannot be generated in the system (which is done automatically) until all the approvals have been recorded and all the documents accounted for in the software. Likewise, activations cannot be committed in the software until the authorized managers and legal opinions have been recorded, documents confirmed, and all payments entered.

Data Bases

The old DOS-based system has operated on a FoxPro DBMS since the agency's inception. This data base had been adequate for the purposes of HAMAG in the past but the new software required a more robust DBMS. FoxPro is a passive data base with little flexibility and limited functionality. The other problem is that FoxPro does not scale well and although no performance problems were reported; as the data base grows the quality and speed degrade over time. The data base also experienced some problems with double entry of information and broken indexed leading to minor data corruption. These problems are reportedly resolved as a result of the new system. The data base will be abandoned when the guarantees and activations are migrated to the Windows software and the new system is fully operational.

The new data base is MS Access. This choice is an improvement over FoxPro but Access is also a passive data base with limited functionality. Fortunately with Access the agency is better able to scale the organization and design better data management features into the system. On a cost/benefit basis, Access is a good decision and right-sized for HAMAG. Any larger DBMS such as SQL Server, Oracle, or Sybase would be significantly more expensive and unjustifiable as these DBMS's are more expensive to purchase and maintain. For the purposes of the agency's operations, the features and functionality of these data bases would be underutilized. Another positive aspect of MS Access is ease of creating new tables and records. HAMAG can modify and expand the data base quickly and easily as the needs of the organization evolve.

Hardware/Communications

The agency operates two-tiered client/server architecture with the production applications and data base resident on a network server. The desktop computers are all connected to the server over the LAN. The Operating System is Windows 2000 Server. The production server is HP Proliant ML350 with 3x36 GB HDD, 2.0 GB RAM, 2.8 Ghz XION processor with mirroring. The desktops are all Pentium 4 PCs/workstations with Windows XP. Repeated attempts to determine the type of local area network operating within HAMAG proved unproductive. The IT analyst was not able to provide this information and the vendor continued to insist that the operating system was Windows 2000. Unfortunately this response had nothing to do with the network and therefore the type of LAN was never determined, but also of little consequence to the overall assessment of the system.

All hardware, operating system, and DBMS are two years old or less. With twenty employees in the organization every staff member has a PC. Within the last two months, HAMAG has also purchased and refreshed eight new desktop computers. The server is also relatively new (within the last eighteen months) and has enough processing capacity and disk space to support organic growth and infusion of the UNDP/EU guarantee program without difficulty. For the foreseeable future, the hardware will be able to support HAMAG and will likely need to be replaced due to age rather than capacity in the coming years.

Back up/Recovery

The IT analyst performs system backups every night and weekly to tape that is stored next to the server in the agency. Monthly tapes are also sent to a secured vault at Zagrebacka Banka. The agency has no off-site disaster recovery or business continuation facility. HAMAG also has no real time ("hot") back up of the production server or failover server in their current architecture. The hard disks are mirrored providing some level of redundancy.

Security

System security is generally good. All users are required to log onto their computers using Windows XP ID and password and access to the system is control by another log in layer. Passwords are minimum length of seven alpha-numeric characters. Users have access to different modules and functions depending on their log in which is tied to their department, position, and role within the organization. Users are not allowed to perform procedures or enter data unless authorized. In cases where users are not permitted to edit or create entries, the information in the system is read only.

Although the application level security is up to industry standards, there was no evidence that the system maintained audit trails or logs of transactions beyond recording user log on and log off.

Reports

The reporting module appears to be robust with a sizable list of standard reports for individual guarantees and the portfolio as a whole. As previously mentioned the reports can dimension the data along a wide array of criteria. The reporting module was developed using Crystal Reports, a commercially available report writer that is also embedded in the system for ad hoc queries of the DBMS and custom reports. With Crystal Reports, HAMAG will have substantially greater capacity to easily and quickly generate reports for management and stakeholders without time consuming programming or elaborate data base queries and manipulation.

Findings and Conclusions

HAMAG does some things very well.

There are many aspects of the IT organization which should be highlighted positively. No organization does everything perfectly, but no organization does everything wrong either. In fact, HAMAG shows signs of good IT management and the potential to grow the agency into the future. Some positive aspects of our findings include:

1. **Management skill levels are high** – we found the staff we spoke with to be competent, knowledgeable, relatively current with the most recent trends in technology, innovative and candid about the state of their operations. This is a positive finding since we can conclude that the agency will be responsive to changes in its environment and innovative in finding workable solutions in the future. We can conclude that HAMAG has demonstrated its ability to further enhance or modify the applications as business requirements change.

2. **The software is high quality** – the new Windows-based version of the guarantee system is well done in terms of features and functionality, user friendliness, logical work and application flow, robust data entry capabilities, and quantity of reports. Crystal Reports will further enhance the agency's ability to generate ad hoc queries and to do further data analysis. Also, the system allows users to download reports into Excel spreadsheets for further analysis.

3. **System security is enforced** – the system enforces User ID and password for everyone using the system. There is a permissioning table that maintains all access to areas of the system based on User ID and role of the employee. The system cannot be broken into easily and no guest passwords are ever issued.

4. **The agency understands the relevance and importance of information technology** – management has placed a high priority on technology as evidenced by the investment made in the new software. Development of custom applications is neither quick nor cheap. HAMAG has demonstrated its commitment through this investment and by equipping all its employees with computers; most of which are less than two years old with eight PCs purchased within the past three months.

5. **High level of cooperation among units** – was evident throughout our analysis. While there is little systems integration, the cooperation among units is very high. There appears to be a spirit of unity within the agency and most of the inter-departmental rivalries were not evident during the five days. It was also clear that with the new guarantee programs, the units work together to ensure the success of the project. We saw no evidence of a breakdown in communications among the groups.

There are some things HAMAG might consider doing better.

Backup and Recovery

At the end of every day, the agency backs up the data base to magnetic tape. These media are stored in the head office building. Certainly this is a critical issue that requires immediate attention. There is no live backup server to take over if the production application server fails. This lack of production backup can have serious consequences if there is a loss of processing.

End of day back up is a minimal level of disaster recovery, and is not sufficient to support the needs of the agency. In the event of a loss, the best restoration of data would be to the last business day. If the headquarters is lost, the best version of the data would be one month old. Reports would not reflect the true financial position of the agency. Great effort and expense would be required to recreate every transaction. All of these inconveniences would play themselves out against a back drop of reputation risk. HAMAG should consider a live backup of the production server off site at another location. If there is a failure or loss of site at home office, the off site server will be able to restore the system to the last transaction.

Physical Security of the Server

The production server is located on the floor in the corridor outside the IT analyst's office in the main public area of HAMAG. The server also protrudes beyond its position directly in front of a photocopying machine. With a high volume of foot traffic along that hall, the agency risks damage to the server by people kicking or dropping something on the machine. The uninterrupted power supply (UPS) is also in the hallway. Damage or disconnection can also occur with this device. No accommodation has been made for air conditioning or dust leaving the server vulnerable to failure or accelerated wear. Finally, the server has no physical access security. While it is true that access to the building is controlled by a guard, once people are inside there is nothing preventing persons from reaching the server.

The entire arrangement must be relocated to a more secure area and enclosed in a climate controlled area. Access to the server should be restricted to authorized personnel only with the door controlled by either key or keyless electronic code/card.

System Documentation

Currently the system is not documented. Since HAMAG intended to convert everything from the DOS-based application to the new software, much of this work was performed without the benefit of programming specifications. There are no application architecture diagrams and no logical data model. The entire system functionality and design resides in the third party programmer's head. If that person leaves the cumulative knowledge of how the software works, handles and stores data, and interfaces with the accounting system will be lost. HAMAG must make it a priority to have the vendor provide system documentation so future work can be performed by other programmers or agency staff. The IT analyst did indicate that the contract with the vendor requires documentation for the system; this deliverable had not been completed. This documentation should be higher priority for HAMAG since the agency is at risk now without proper backup of their system design.

Implications for UNDP/EU Guarantee Program

The plan to move the UNDP/EU Guarantee Program into HAMAG will have some implications for the IT system due to some fundamental differences in how the two organizations operate. While the move will require additional programming and system modifications, HAMAG's current vendor and staff have demonstrated they are more than capable of accommodating the changes to the system. These changes have been communicated to the IT analyst but little has yet been done to fully understand the requirements of the UNDP program and how much modification to the software will be required. It is also still not clear if the program will remain intact once absorbed by HAMAG or integrated into the existing guarantee schemes by shedding bank relationships and establishing new guarantees under the HAMAG program. Regardless of the final form for the UNDP program, there are three major considerations that need to be addressed by HAMAG sooner rather than later.

1. The UNDP/EU program deposits guarantee funds into accounts in the partner banks. These funds earn interest that is then used by UNDP to offset expenses and reinvest in the guarantee program. Partner banks report interest earned on these accounts through monthly bank statements. HAMAG does not operate in this manner and will need to modify the accounting system by creating corresponding asset accounts on its general ledger and posting earned interest to those accounts.

2. The banks also report actual repayment to the guaranteed loans on the same schedule. Some modification to the guarantee system may also be necessary depending on how HAMAG wants to track actual payment performance against loans. This modification may involve creating screens to capture actual payments along with the system generated pro forma payment schedule. HAMAG will also need to create new reports to monitor actual loan performance.

3. The UNDP has no automated accounting or record keeping system for its program. All bank correspondence, statements, loan documentation, and guarantee contracts are hard copy files. HAMAG will have a significant and time consuming data entry process to load the UNDP loans into its system. It will also be necessary at this time to construct the ability to identify UNDP loans in the system so the portfolio can be tracked and examined separately. It is expected that HAMAG will work with each of the four banks in the program to adapt their records. At best this will be an easy electronic transfer; at worst this will be an extensive data entry exercise.

The above areas of concern are certainly not justification to abandon the UNDP program but more research will have to be performed to determine if other business rules or procedures exist in the UNDP portfolio that will impact the system. Fortunately HAMAG is well positioned to accommodate any changes the UNDP program or organic growth may require in the future.

Persons Interviewed and Consulted

Croatian Agency for SME's – HAMAG

- Mr. Zoran Barisic, Executive Board President
- Mr. Veljko Paus, Head of Department for Guarantees
- Ms. Silvana Bandalo, Information Systems Analyst
- Ms. Lidija Vidmar, Guarantee Department
- Ms. Neda Gostovic, Activations Department
- Ms. Marica Bracika, Accounting

Mr. Denis van Dam – formerly, National Program Coordinator, UNDP/UNOPS

Mr. Basil Comnas, Project Coordinator, UNDP/UNOPS Zagreb, Croatia

Pozeska Banka dd Pozega

- Mr. Zarko Timarac, Director, Investment Department
- Ms. Jadranka Pavkoric, Foreign Payments, Loans, and Guarantees

Ms. Senka Ramic – formerly, Director, LEDA Okucani (LEDA for Western Slavonia)

Croatia Banka dd

- Ms. Mirjana Cizmek, Director of Retail Loans
- Ms. Maja Petvajdic

Nova Banka dd – Mr. Drazen Kaic, Director, Business Center, Corporate Banking

Raiffeisenbank Austria dd Croatia

- Ms. Vesna Ciganek-Vukovic, Executive Director, Corporate Banking Division
- Ms. Anamarija Zujl, Manager, Corporate Banking Division

Erste & Steiermarkische Bank dd

- Mr. Drazen Octenjak, Deputy Director, Corporate Division
- Ms. Valentina Vukelic, Account Manager, Corporate Division
- Ms. Sandra Radnic, Head of Target Products Management, Sale Support Division

Ms. Charlotte Ruhe – Head of Office, European Bank for Reconstruction and Development

ESP Project

- Mr. Tocher Mitchell, Finance Director
- Mr. Ivan Pilepic, Finance Manager
- Mr. Darije Josic, Business Development Manager

Adams National Bank, Washington DC

- Ms. Kathy Speakman, Vice President
- Ms. Kathy Katcher, Vice President

Ms. Gloria Reyes – Vice President, Fidelity Bank and Trust, Bethesda, Maryland

Mr. Harvey D. Bronstein – Senior International Economist, US Small Business Administration